

## PROJECT DESCRIPTION

## GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF APS (ACCESSIBLE PEDESTRIAN SIGNALS) AND UPGRADING OF PEDESTRIAN SIGNING FOR THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 45 (YORK ROAD) AND YARMOUTH ROAD IN BALTIMORE COUNTY, MARYLAND. MD 45 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

## INTERSECTION OPERATION

## 1. NORMAL OPERATION

THE INTERSECTION WILL OPERATE IN A FLASHING MODE.

## 2. SPECIAL OPERATION

THE INTERSECTION WILL OPERATE AS INDICATED ABOVE, UNLESS A PUSHBUTTON IS ACTIVATED WHICH WILL STOP ALL APPROACHES.

## TYPICAL MESSAGES FOR ACCESSIBLE PED SIGNALS

MD 45 (YORK ROAD) AND YARMOUTH ROAD -- NORTH LEG

## STREETS AT 90 DEGREES

WAIT: "WAIT TO CROSS YORK AT YARMOUTH. WAIT." \*

WALK: RAPID TICK

\* MESSAGE USED IF DISTANCE FROM NEAREST PUSHBUTTON FOR PERPENDICULAR CROSSING IS < 10'  
\*\* MESSAGE USED IF CROSSWALK DIVERGES FROM OR CONVERGES WITH PARALLEL TRAFFIC

NOTE: MESSAGES FOR INTERSECTION CONFIGURATIONS, VARYING FROM THE ABOVE ARE TO BE APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.

## CONTROLLER REQUIREMENTS

THE EXISTING POLE MOUNTED CABINET AND CONTROLLER WILL BE USED. THE CONTROLLER WILL BE RETROFITTED TO OPERATE APS EQUIPMENT.

## MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT. ADDITIONAL TRAFFIC CONTROL STANDARDS MAY BE USED AS DIRECTED BY THE ENGINEER.

STANDARD NO. MD-104.04-03 (LEFT LANE CLOSURE)

STANDARD NO. MD-104.04-05 (RIGHT LANE CLOSURE)

STANDARD NO. MD-104.02-13 (INTERSECTION FLAGGING OPERATION)

## PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MS. ERIN KUHN  
ASSISTANT DISTRICT ENGINEER - TRAFFIC  
PHONE: (410) 229-2381

MR. MIKE PASQUARIELLO  
DISTRICT UTILITY ENGINEER  
PHONE: (410) 229-2341

MR. ANDRE FUTRELL  
ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
PHONE: (410) 229-2361

MR. ROBERT SYNDER  
ASSISTANT CHIEF, TRAFFIC OPERATIONS DIVISION  
PHONE: (410) 787-7631

## WIRING DIAGRAM

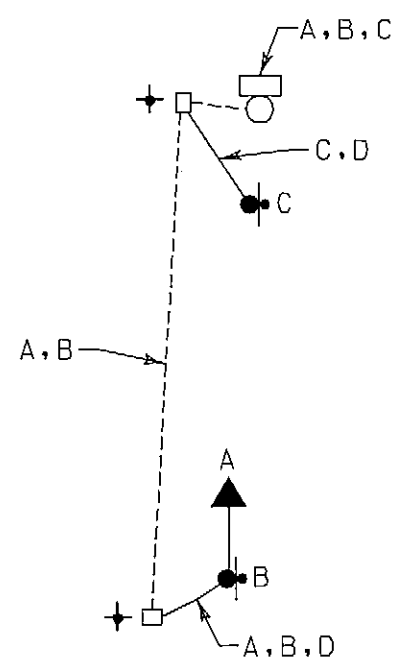
## WIRING KEY

A } 5-CONDUCTOR ELECTRICAL  
CABLE (NO. 14 A.W.G.)

B } 2-CONDUCTOR ELECTRICAL  
CABLE (NO. 14 A.W.G.)

D } STRANDED BARE COPPER  
GROUND WIRE (NO. 6 A.W.G.)

+ - 3/4 IN. X 10 FT. GROUND ROD



## EQUIPMENT LIST "A"

## A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
9570	54 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF (GROUND MOUNT) : - 4 EACH W11-2 SIGN (36 IN. x 36 IN.) - GROUND MOUNT - 4 EACH W16-7D SIGN (24 IN. x 12 IN.) - GROUND MOUNT - 1 EACH R1-1 SIGN (36 IN. x 36 IN.) - GROUND MOUNT
9571	34 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF (POLE MOUNT) : - 1 EACH W11-2 (48 IN. x 48 IN.) - MAST ARM MOUNT - 2 EACH R10-3(1) SIGN (9 IN. x 15 IN.) TO READ "PUSHBUTTON TO CROSS YORK ROAD"

## EQUIPMENT LIST "C"

## C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

ALL REMOVED SIGNAL MATERIALS SHALL BECOME PROPERTY OF THE CONTRACTOR

## EQUIPMENT LIST "B"

## B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC
2001	1 C.Y.	CLASS 2 EXCAVATION
2002	1 C.Y.	TEST PIT EXCAVATION
5004	65 L.F.	12 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
5005	15 L.F.	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
6001	352 L.F.	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
6002	450 S.F.	5 INCH CONCRETE SIDEWALK
6003	40 S.F.	DETECTABLE WARNING SURFACES
8002	1 EACH	2 WIRE CENTRAL CONTROL UNIT
8008	2 EACH	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION & SIGNS
8009	2 EACH	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8016	1 EACH	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEADS
8024	1 EACH	REMOVE & DISPOSE MATERIAL & EQUIPMENT (PER ASSIGNMENT)
8040	25 L.F.	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - TRENCHED
8041	50 L.F.	WOOD SIGN SUPPORTS UP TO 4' X 6'
8042	88 S.F.	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8044	25 L.F.	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8055	145 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8057	120 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

## PHASE CHART

	1	2	3	4	5	6	7	8	
	R	R	R	R	R	R	R	R	
	Y	Y	Y	Y	Y	Y	Y	Y	
	O	O	O	O	O	O	O	O	
NORMAL OPERATION	8" FLY	8" FLY	8" FLY	8" FLY	FLR	FLR	DW	DW	← →
	QUICK 8" FLY	QUICK 8" FLY	QUICK 8" FLY	QUICK 8" FLY	R	R	DW	DW	
SPECIAL OPERATION	12" Y	12" Y	12" Y	12" Y	R	R	DW	DW	
	R	R	R	R	R	R	WK	WK	
	R	R	R	R	R	R	FLOW	FLOW	
	R	R	R	R	R	R	DW	DW	

## NOTE:

FOR SIGNAL HEADS 5 AND 6, THE TOP SIGNAL INDICATION WILL OPERATE DURING NORMAL AND SPECIAL OPERATION. THE BOTTOM SIGNAL INDICATION WILL ONLY FLASH WHEN ACTIVATED BY CONFLICT MONITOR.

TOD NO: XY125-15  
SHA NO: BA087B59  
MD 45 @ Yarmouth Road



STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
MD 45 (York Road) and Yarmouth Road  
Towson, Maryland

## GENERAL INFORMATION SHEET

SCALE NONE ADVERTISED DATE 10/12/2012 CONTRACT NO. XY1255185

DESIGNED BY S. Bloss of WRA COUNTY Baltimore

DRAWN BY S. Bloss of WRA LOGMILE 030004501.03

CHECKED BY N. Leary of WRA TIMS NO. 1057

F.A.P. NO. TOD NO.

TS NO. 3460 C DRAWING TSP-3 OF 3 SHEET NO. 3 OF 3



WHITMAN, REQUARDT  
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